

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listing of claims in the application:

LISTING OF CLAIMS:

Claim 1 (Currently amended): A portable UV detector with simple operation comprising:

a cylindrically shaped main body ~~with having a hollow core running through both~~
through bore extending between opposing ends of the main body, the main body having a
display window formed through one side portion thereof and in open communication
with the through bore, a through opening formed in a side portion displaced from the
display window and in open communication with the through bore;

a filtering lens transmissive to UV radiation mounted on one end of the main body
and a screw plug on the ~~other~~ opposing end of the main body,

wherein an enclosure is disposed behind the screw plug ~~is defining~~ a battery
chamber ~~and a display panel window is formed on an external wall of the main body;~~

a longitudinally extended printed circuit board disposed in the through bore, the
printed circuit board having (a) a light detection circuit including a light detector
disposed adjacent one longitudinal end of the printed circuit board and beneath the
filtering lens, (b) a power circuit having a first output connected to the light detection

circuit and a second output, the power circuit including a push-button switch mounted on the printed circuit board and extending through the through opening of the main body,
and (c) an output conversion circuit on a printed circuit board for converting the light intensity measured to the corresponding UV radiation level, whose connected to the first output of the power circuit and having an input terminal ~~[[is]]~~ connected to ~~[[a]]~~ the light detector; ~~located underneath the filtering lens, and the output terminal of the output conversion circuit is connected to a display module mounted in the display panel window of the main body; and~~

a plurality of multiple batteries housed in the enclosure of the main body battery chamber behind the screw plug and electrically connected to the power circuit to provide the an operating voltage to the first output for powering the output conversion circuit and the light detector detection circuit responsive to operation of the push-button switch; and,

a display module mounted in said display window and having a plurality of display segments arranged to present a graphical display, one of said plurality of display segments being connected to the second output of the power circuit for energization thereof responsive to the operation of the push-button switch, a remaining portion of the plurality of display segments being connected to the output conversion circuit for respective energization thereof responsive to detection of predetermined levels of UV radiation.

Claim 2 (Currently amended): A portable UV detector with simple operation as claimed in claim 1, wherein ~~a push-button switch is mounted on the printed circuit board of the detector to control activation/deactivation of the control circuit composed of a battery, an output conversion circuit, a light detector and a display module.~~ the power circuit includes a resistor having one end coupled to the first output and an opposing end connected to the second output, and a Zener diode having one end connected to the second output and an opposing end coupled to a reference terminal.

Claim 3 (Currently amended): A portable UV detector with simple operation as claimed in claim 2, wherein the ~~output conversion circuit comprises:~~

~~a light detection circuit composed of multiple~~ includes a plurality of resistors ~~to forming~~ a voltage divider circuit connected in series with the light detector, so that at each the voltage divider having voltage tapping junction for output of a reference voltage is produced, and the circuit is also connected to the light detector formed by a photo resistor;

the output conversion circuit including a comparator circuit formed ~~from multiple~~ by a plurality of comparators, wherein ~~the~~ a reference voltage terminal of each respective comparator is ~~respectively~~ connected to a the voltage tapping junction, [[;]] and the input terminal of each comparator is having an input terminal connected to a resistor ~~with~~ of a different resistance value, [[;]] and the output terminal of each comparator is respectively

MR929-750

Application No. 10/084,951

Responsive to Office Action dated 28 October 2003

connected to ~~the~~ a pin corresponding ~~pin~~ to the remaining portion of the plurality of display segments of the display module. [[:]]

~~a power switch circuit connected in series to the push button switch on the printed circuit board and the battery to control the operating voltage of the light detection circuit, comparator circuit and display module.~~

Claims 4 – 13 (Cancelled).